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Herve Marche

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EXAMINER

MACARTHUR, VICTOR L

ART UNIT

PAPER NUMBER

3679

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DELIVERY MODE

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/783,585	Applicant(s) MARCHE, HERVE	
	Examiner VICTOR MACARTHUR	Art Unit 3679	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 December 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 5,7-11,19-24 and 26-30 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 22,27 and 28 is/are allowed.
- 6) ☒ Claim(s) 7-11,19-21,23,24,29 and 30 is/are rejected.
- 7) ☒ Claim(s) 5 and 26 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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DETAILED ACTION

Drawings

The drawings were received on 12/15/2009. These drawings are acceptable for the purposes of examination.

Double Patenting

Claims 5 and 26 are objected to under 37 CFR 1.75 as being a substantial duplicate of allowed claims 27 and 28, respectively. When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k).

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 20 and 29 are rejected under 35 U.S.C. 102(b) as being anticipated by Yoshioka, 4,026,572.

Regarding claim 20, as best understood, Yoshioka discloses, in Figure 31, an assembly comprising a suspended structure **8**, load bearing structure **1**, a hinge pin **3a**, first parts **4j**, and a second part **4f**. The suspended structure **8** includes two plates **2** parallel to each other. The load

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bearing structure **1** is coupled to the suspended structure **8** and positioned between the two plates **2**. The hinge pin **3a** having a hinge pin axis **A3** (see marked-up attachment provided in the last Office action). The first parts **4j** are installed in the suspended structure **8** and are able to rotate about a first axis **A1**. The second part **4f** is installed in the load bearing structure and is able to rotate about a second axis **A2**. The hinge pin **3a** passes through the first parts **4j** and the second part **4f**. The first axis **A1** and the second axis **A2** is parallel and offset from each other and the hinge pin axis **A3**. The first and a second parts **4j**, **4f** have one rotatable degree of freedom that is fixed along the hinge pin axis (note that while stationary there is no motion and thus the degree of freedom is temporally fixed). The first parts **4j** in the plates **2** of the suspended structure **8** cooperate with the plates **2** in the suspended structure **8** through spherical surfaces to define a ball joint connection therebetween (col. 22, lines 8-11).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 7-11 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Swerer, 1,900,081.

Regarding claim 19, Swerer, disclose, in Figures 2 and 4, an assembly comprising a load bearing structure **4**, a suspended structure **1**, and a coupling member **9**. The load bearing structure **5** has a first circular member **8**. The first circular member **8** is able to rotate about a

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horizontally oriented first axis (note that one merely has to place the assembly in a cellar door that is horizontal to ground, versus being placed in the conventional vertical direction). The first circular member **8** has a first aperture **A1** (see marked-up attachment). The suspended structure comprises two plates **3** (the circular shaped plates) parallel to each other between which the load bearing structure is placed. Each of the two plates **3** have a second a second circular member **7** able to rotate about a common horizontally oriented second axis. Each of the second circular members **7** has a second aperture **A2**. The coupling member **9** is received in the first aperture **A1** and the second aperture **A2**. The coupling member **9** is oriented along a third axis parallel and adjacent to the first axis and the second axis. The first circular member **8** and the second circular member **7** are unable to rotate with respect to one another about the third axis (the axis along the coupling member **9**). The first circular member **8** and the second circular member **7** are unable to rotate with respect to one another about the third axis. Rotation prevention means (the hexagonal cross section of the coupling member and the holes being hexagonal) is provided between the coupling member **9** and each of the first and second circular members **8**, **7**. The rotation prevention means is configured to prevent any relative rotation therebetween. Given that the assembly would have been placed in the horizontal direction during placing the assembly in a cellar door that is horizontal to the ground versus a door that is placed in the conventional vertical direction, the second axis would have been offset vertically upwards from the first axis. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to place the assembly of Swerer in the horizontal direction so that a cellar door can be opened vertically while at the same time having the same expectation of success, i.e., to prevent

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the door from sticking to the jamb, or being away from the jamb where catch members cannot operate, as taught by Swerer.

Regarding claim 7, the suspended structure **1** is capable of rotating about at least one of the first axis and the second axis.

Regarding claim 8, the load bearing structure **4** is capable of rotating about at least one of the first axis and the second axis.

Regarding claim 9, the first circular member **8** and the second circular member **7** are not independently moveable (note that they move dependently).

Regarding claim 10, the coupling member **9** is a circular hinge pin **9**.

Regarding claim 11, the first aperture **A1** and the second aperture **A2** are circular (note that the more flats are placed in the same cross-section, the flats will eventually form a substantially circular shape).

Claim 24 is rejected under 35 U.S.C. 103(a) as being unpatentable over Swerer, 1,900,081, as applied to claims 7-11 and 19, and further in view of Brilmyer, 5,580,201.

Regarding claim 24, Swerer, as discussed, fails to disclose, the rotation prevention means including splines provided between the circular hinge pin and the first and the second apertures. Instead, Swerer teaches, flats as also taught by Brilmyer, Fig. 6. Brilmyer teaches, in Figure 5, the use of splines 48 as an anti-rotation means to prevent a hinge pin from rotating relative to an eccentric part. Therefore, as taught by Brilmyer, it would have been obvious to one of ordinary skill in the art at the time the invention was made to substitute the flats as the rotation prevention

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means, to splines to prevent the hinge pin from rotating relative to the first and second circular members **7**, **8** found in Swerer.

Claims 21, 29 and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yoshioka, 4,026,572, in view of Buch, 3,529,790.

Regarding claim 21, Yoshioka discloses, in Figure 31, an assembly comprising a load bearing structure **4**, a suspended structure **8**, a hinge pin **3a**, first parts **4j**, and a second part **4f**. The suspended structure has two plates **2** parallel with one another. The load bearing structure **5** is coupled to the suspended structure **8** and positioned between the two plates **2**. The first parts **4j** are rotatable about a first axis **A2**. The second part **4f** is rotatable about a second axis **A1** (see marked-up attachment provided on 9/30/08). The first parts **4j** are in the plates **2** and cooperate with the plates with the suspended structure **8** through spherical surfaces (col. 22, lines 8-11). The hinge pin **3a** has a hinge pin axis **A3**. The first axis **A2** and the second axis **A1** are parallel and offset from each other and the hinge pin axis **A3**. The first and second parts **4j**, **4f** have one rotatable degree of freedom that is fixed along the hinge pin axis (note that while stationary there is no motion and thus the degree of freedom is temporally fixed). However, Yoshioka fails to disclose intermediate parts forming ball joint cages fixed in each of the two plates of the suspended structure and having internal spherical surfaces cooperating with external spherical surfaces of the second circular members.

- Buch teaches, in Figure 4a, intermediate parts **64** forming ball joint cages fixed in each of the two plates of a suspended structure and having internal spherical surfaces cooperating with external spherical surfaces of second circular members

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66 to retain the second circular members, i.e., the spherical circular members, in pivotal contact rather than being in direct spherical contact with the two plates.

- Therefore, as taught by Buch, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide additional intermediate parts forming ball joint cages fixed in each of the two plates of the suspended structure of Yoshioka to retain the second circular members in pivotal contact with intermediate parts rather than being in direct contact with the two plates as suggested by Yoshioka.

Claim 23 is rejected under 35 U.S.C. 102(b) as being anticipated by Douglas, EP-16270, in view of Sugiyama et al., 4,726,603.

Regarding claim 23, Douglas discloses, in Figure 15, an assembly comprising a load bearing structure **75**, a suspended structure **75**, and a coupling member **50**. The load bearing structure **75** has a first circular member **72** able to rotate about a horizontally oriented first axis **A1** (see marked-up attachment). The first circular member **72** has a first aperture **A4**. The suspended structure **75** has a second circular member **73** able to rotate about a horizontally oriented second axis **A2**. The second circular member **73** has a second aperture **A5**. The coupling member **50** is received in the first and second apertures **A4**, **A5** to couple the suspended structure to the load bearing structure with the first axis **A1** adjacent to the second axis **A2**. The coupling member being oriented along a third axis **A3** parallel and adjacent to the first axis **A1** and the second axis **A2**. The first and second circular members **72**, **73** are unable to rotate with respect to one another about the third axis **A3** (note that the clamping screw force prevents the

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first and second circular members from moving). The second axis is offset vertically upwards from the first axis (note that the third axis can be adjusted in all direction in the Cartesian coordinate system). The first and second circular members **72**, **73**, include a spherical outer surface (the ball bearings constitute a spherical outer surface) to define a ball joint connection with corresponding interface surfaces of the load bearing and suspended structures. However, Douglas fails to disclose a rotation prevention means provided between the coupling member **50** and each of the first and second circular members **72**, **73** to prevent any relative rotation therebetween.

- Sugiyama et al. teach, in Figure 3, Sugiyama et al. teach, in Figure 3, rotation prevention means provided between a first circular member **64** and a second circular member **48** to prevent a coupling member **54** from rotating relative to the second circular member **48** (col. 3, lines 28-32) and to have the coupling member **54** rotate integrally with a first circular member **64** (col. 3, lines 56-59).
- Therefore, as taught by Sugiyama et al., it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide rotation prevention means between the first circular member and the second circular members so that the second circular member and the first circular member rotate integrally with the coupling member. Given the modification, the first circular member and the second circular member **4j** would have been unable to rotate with respect one another about the third axis.

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Allowable Subject Matter

Claim 22, 27 and 28 are allowed for reasons set forth regarding claims 22, 5 and 25, respectively, in the previous 9/15/2009 Office Action.

Response to Arguments

The applicant's arguments are not persuasive.

All of applicant's claimed limitations are met by the prior art within the broadest reasonable interpretation of the claim language. Subject matter that is not recited in the claims cannot be relied upon to persuasively argue for allowability. Claimed limitations cannot be persuasively argued to have a scope narrower than that, which is reasonably most broad. In a product claim, intended use, labeling and functional language cannot overcome the prior art wherein the prior art discloses structure fully capable of performing such uses and functionality. Capability need not be expressly stated in the prior art wherein it is inherent to the structure. Such inherency of functional capability is presumed to be present in the prior art structure until applicant proves otherwise with submission of actual evidence, in accordance with MPEP 2112.01(I) and 2114.

MPEP 2144 clearly states that "The rationale to modify or combine the prior art does not have to be expressly stated in the prior art; the rationale may be expressly or impliedly contained in the prior art or it may be reasoned from **knowledge generally available to one of ordinary skill in the art, established scientific principles, or legal precedent established by prior case law**" (emphasis added).

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Victor MacArthur whose telephone number is (571) 272-7085. The examiner can normally be reached on 8:30am - 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel P. Stodola can be reached on (571) 272-7087. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR

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system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197.

March 25, 2010

/Victor MacArthur/
Primary Examiner, Art Unit 3679

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Douglas, EP-16270

